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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/798,682

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Joel A. Schwartz

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EXAMINER

PAINTER, BRANON C

ART UNIT

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05/14/2008

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/798,682	Applicant(s) SCHWARTZ, JOEL A.	
	Examiner BRANON C. PAINTER	Art Unit 3633	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 25 March 2008.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-10 and 13-23 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-10 and 13-23 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 112

1. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

2. Claim 2 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.
3. Claim 2 recites the limitation "the spacing...construction." This phrase renders the claim vague and indefinite, as it attempts to define the spacing of the insulation product slots with respect to the spacing of unclaimed floor joists.

Claim Rejections - 35 USC § 102

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

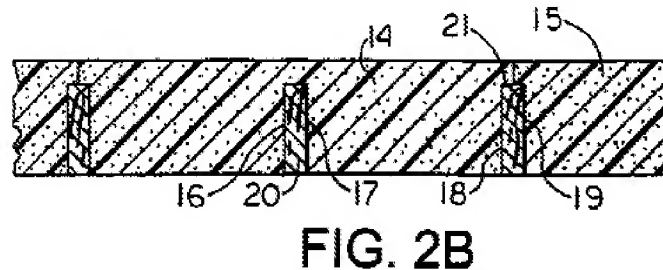
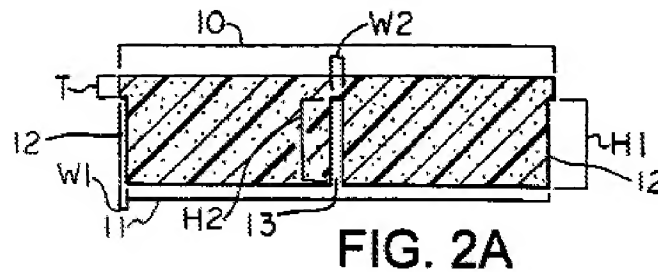
5. Claims 1-5 and 7-9 are rejected under 35 U.S.C. 102(b) as being anticipated by Grinshpun et al. (U.S. Patent No. 6,226,943).
6. Regarding claim 1, Grinshpun et al. discloses an insulation panel having all of the applicant's claimed structure, including:
 - a. A single unitary insulation member (foam sheet, Fig. 2A, 2B) formed of a single rigid cellular insulating material (col. 4, lines 6-10) including a plurality

of slots extending width-wise into the single rigid insulating material across one side of the member ("groove" 13, Fig. 2A, 2B; "The foam sheet of the invention may have any suitable number of grooves necessary to accommodate any number of support members," col. 6, lines 35-37; "As depicted, the foam sheet has two sections separated by a single groove. However, it is within the scope of this invention to use a greater number of sections separated by a correspondingly greater number of grooves," col. 4, lines 16-20).

- b. The member including a wall at the base of each slot having a thickness of at least about 0.375 inch and less than about 1 inch ("The major side of the foam sheet which does not have grooves...preferably has a thickness T...of at least 0.5 inch...and most preferably no greater than 1 inch," col. 6, lines 13-18; Fig. 2A).
- c. The member having a thickness, in regions between the slots, of from about 1 to about 3 inches ("It is preferred that the height of the grooves be at least about 1 inch," col. 3, lines 66-67). The examiner notes that the height refers to H1 and H2 in Fig. 2A.
- d. The examiner notes that phrases such as "dimensioned to be mounted lengthwise on a joist header" and "dimensioned to receive an end of a floor joist" are considered to be functional language and not structural limitations. A recitation of the intended use of the claimed invention must result in a structural difference between the claimed invention and the prior art in order

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to patentably distinguish the claimed invention from the prior art. If the prior art structure is capable of performing the intended use, then it meets the claim.



Reproduced from Grinshpun et al.

7. Regarding claims 2 and 9, Grinshpun et al. discloses slots disposed at spaced intervals [claim 2] of 16 inches [claim 9] corresponding to predetermined spacing of the floor joists ("Typically, adjacent support members will be approximately regularly spaced...In the United States, adjacent vertical support members are most typically spaced 16 inches apart on center," col. 2, lines 40-46).
8. Regarding claim 3, Grinshpun et al. discloses a wall, at the base of each slot, sufficiently thick to provide a thermal break between a joist and joist header ("T," Fig. 2A; "The major side of the foam sheet which does not have grooves...preferably has a thickness T...of at least 0.5 inch...and most preferably no greater than 1 inch," col. 6, lines 13-18; Fig. 2A).

9. Regarding claim 4, Grinshpun et al. discloses an insulating member with width substantially equal to the width of a joist header ("support member" 20 and "complimentary groove" 13, Fig. 2A, 2B; "the width of the grooves closely approximates the exact width of the support members," col. 3, lines 8-9).
10. Regarding claim 5, Grinshpun et al. discloses slots extending across the entire width of the insulating member (Fig. 2A, 2B).
11. Regarding claim 7, Grinshpun et al. discloses an insulating member made of polyurethane ("Examples of polymers which may be used to make a compressible and resilient foam include...polyurethane," col. 5, lines 35-38).
12. Regarding claim 8, Grinshpun et al. discloses slots capable of receiving an end of a wooden I-beam ("grooves" 13, Fig. 2A, 2B). "Grooves" 13 are capable of receiving any wooden I-beam whose top and bottom members were sized to fit in "groove" 13.
 - a. The examiner notes that phrases such as "dimensioned to receive an end of a wood I-beam" are considered to be functional language and not structural limitations. A recitation of the intended use of the claimed invention must result in a structural difference between the claimed invention and the prior art in order to patentably distinguish the claimed invention from the prior art. If the prior art structure is capable of performing the intended use, then it meets the claim.

Claim Rejections - 35 USC § 103

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13. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

14. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148

USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

15. Claims 6, 13-20, and 22-23 are rejected under 35 U.S.C. 103(a) as being unpatentable over Grinshpun et al. (U.S. Patent No. 6,226,943) in view of Charlson (U.S. Patent No. 6,125,608).

16. Regarding claims 6 and 13:

- a. Grinshpun discloses an insulation panel as set forth above.
- b. Grinshpun does not expressly disclose a wood member bonded to the insulating member on a side opposite the slotted side.
- c. Charlson a wood member ("sheathing" 1330, Fig. 14; col. 1, lines 62-63) bonded (col. 3, lines 33-37) to a slotted insulating member on a side opposite the slotted side (1410, Fig. 14).
- d. At the time of the invention, it would have been obvious to a person of ordinary skill in the art to modify the insulation panel of Grinshpun by bonding

a wooden sheathing member to its unslotted surface as taught by Charlson, in order to provide a one-piece insulated sheathing member for building construction.

- e. The examiner notes the phrase “configured so that...construction” is considered a recitation of intended use. As such, it is given little patentable weight. That said, the sheathing member disclosed by Charlson could be considered a joist header, and member 220 could be considered a joist.

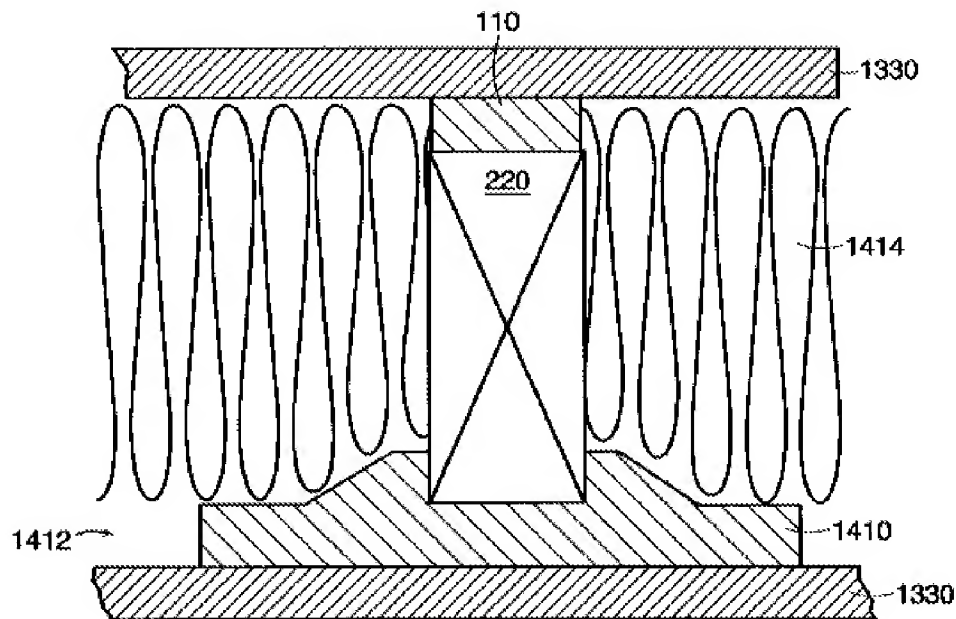


FIG. 14

Reproduced from Charlson

17. Regarding claims 14 and 20, Grinshpun et al. further discloses slots disposed at spaced intervals [claim 14] of 16 inches [claim 20] corresponding to predetermined spacing of the floor joists (“Typically, adjacent support members will be

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approximately regularly spaced...In the United States, adjacent vertical support members are most typically spaced 16 inches apart on center,” col. 2, lines 40-46).

18. Regarding claim 15, Grinshpun et al. further discloses a wall, at the base of each slot, sufficiently thick to provide a thermal break between a joist and joist header (“T,” Fig. 2A; “The major side of the foam sheet which does not have grooves...preferably has a thickness T...of at least 0.5 inch...and most preferably no greater than 1 inch,” col. 6, lines 13-18; Fig. 2A).
19. Regarding claim 16, Grinshpun et al. further discloses an insulating member with width substantially equal to the width of a joist header (“support member” 20 and “complimentary groove” 13, Fig. 2A, 2B; “the width of the grooves closely approximates the exact width of the support members,” col. 3, lines 8-9).
20. Regarding claim 17, Grinshpun et al. further discloses slots extending across the entire width of the insulating member (Fig. 2A, 2B).
21. Regarding claim 18, Grinshpun et al. further discloses an insulating member made of polyurethane (“Examples of polymers which may be used to make a compressible and resilient foam include...polyurethane,” col. 5, lines 35-38).
22. Regarding claim 19, Grinshpun et al. further discloses slots capable of receiving an end of a wooden I-beam (“grooves” 13, Fig. 2A, 2B). “Grooves” 13 are capable of receiving any wooden I-beam whose top and bottom members were sized to fit in “groove” 13.
 - a. The examiner notes that phrases such as “dimensioned to receive an end of a wood I-beam” are considered to be functional language and not structural

limitations. A recitation of the intended use of the claimed invention must result in a structural difference between the claimed invention and the prior art in order to patentably distinguish the claimed invention from the prior art. If the prior art structure is capable of performing the intended use, then it meets the claim.

23. Regarding claim 22, Grinshpun et al. further discloses member including a wall at the base of each slot having a thickness of at least 0.375 inch ("The major side of the foam sheet which does not have grooves...preferably has a thickness T...of at least 0.5 inch...and most preferably no greater than 1 inch," col. 6, lines 13-18; Fig. 2A).

24. Regarding claim 23, Grinshpun et al. further discloses a member having a thickness, in regions between the slots, of from about 1 to 3.5 inches ("It is preferred that the height of the grooves be at least about 1 inch," col. 3, lines 66-67). The examiner notes that the height refers to H1 and H2 in Fig. 2A.

25. Claim 10 is rejected under 35 U.S.C. 103(a) as being unpatentable over Grinshpun et al. (U.S. Patent No. 6,226,943) in view of Berdan, II (U.S. Patent No. 6,042,911).

- a. Grinshpun et al. discloses an insulation panel as set forth above.
- b. Grinshpun et al. does not expressly disclose slots spaced at intervals of about 24 inches.
- c. Berdan, II discloses slots spaced at intervals of about 24 inches ("most framing has a standard or traditional size of either 16 inches or 24 inches

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between joists," col. 1, line 67 - col. 2, line 2). The spacing of joist-receiving slots as taught by Berdan, II results in industry standard spacing common to the art of wood frame construction.

- d. Grinshpun et al. and Berdan, II are analogous art because both are from the field of endeavor of building construction.
- e. At the time of the invention, it would have been obvious to a person of ordinary skill in the art to modify the slots of Grinshpun et al. by spacing the slots 24 inches apart as taught by Berdan, II, in order to abide by industry standards.
- f. The examiner further notes that it would have been an obvious matter of design choice to modify the slots of Grinshpun et al. by spacing them 24 inches apart, since applicant has not disclosed that this specific spacing solves any stated problem or is for any particular purpose and it appears that a spacing of 16 inches as taught by Grinshpun et al. would perform equally well.

26. Claim 21 is rejected under 35 U.S.C. 103(a) as being unpatentable over Grinshpun et al. (U.S. Patent No. 6,226,943) in view of Charlson (U.S. Patent No. 6,125,608) as applied to claims 6, 13-20, and 22-23 above, and further in view of Berdan, II (U.S. Patent No. 6,042,911).

- a. Grinshpun/Charlson discloses an insulation panel with attached wood member as set forth above.

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- b. Grinshpun/Charlson does not expressly disclose slots spaced at intervals of about 24 inches.
- c. Berdan, II discloses slots spaced at intervals of about 24 inches ("most framing has a standard or traditional size of either 16 inches or 24 inches between joists," col. 1, line 67 - col. 2, line 2). The spacing of joist-receiving slots as taught by Berdan, II results in industry standard spacing common to the art of wood frame construction.
- d. At the time of the invention, it would have been obvious to a person of ordinary skill in the art to modify the slots of Grinshpun et al. by spacing the slots 24 inches apart as taught by Berdan, II, in order to abide by industry standards.
- e. The examiner further notes that it would have been an obvious matter of design choice to modify the slots of Grinshpun et al. by spacing them 24 inches apart, since applicant has not disclosed that this specific spacing solves any stated problem or is for any particular purpose and it appears that a spacing of 16 inches as taught by Grinshpun et al. would perform equally well.

Response to Arguments

27. Applicant's arguments filed 03/25/08 have been fully considered but they are not persuasive.

28. Applicant argues that the phrase “formed of a single rigid insulating material” differentiates the instant invention from Grinshpun, since Grinshpun discloses “compressible material that is different from the material of which the rest of the panel is formed,” and since “eliminating the compressible portions would constitute a wholesale reconstruction.” However, the Grinshpun Figure 2A used to reject applicant’s claims is made of a single material (col. 4, lines 6-7), the material being the same material as applicant’s invention (polyurethane, col. 5, lines 35-38).
29. The examiner further notes that, while Grinshpun is disclosed as having the ability to compress, it also has a certain structural rigidity, and as such meets the “rigid” claim limitation. This is supported by Grinshpun’s specification at column 4, line 10 where he says that portions can be “more” rigid. The examiner contends that this implies that the entire panel is rigid with some portions being “more” rigid than others.
30. In response to applicant’s argument that there is no suggestion to combine the references, the examiner recognizes that obviousness can only be established by combining or modifying the teachings of the prior art to produce the claimed invention where there is some teaching, suggestion, or motivation to do so found either in the references themselves or in the knowledge generally available to one of ordinary skill in the art. See *In re Fine*, 837 F.2d 1071, 5 USPQ2d 1596 (Fed. Cir. 1988) and *In re Jones*, 958 F.2d 347, 21 USPQ2d 1941 (Fed. Cir. 1992). In this case, Berdan teaches that it is well-known, and even standard practice in the industry, to space framing between joists not only at 16 inches, as taught by

Grinshpun, but also at 24 inches (col. 1, line 67 – col. 2, line 2). Considering that Berdan demonstrates that this exact spacing is long-established and industry-known, it would have been obvious to use his teachings on the standard spacing between joists to modify Grinshpun's slot spacing.

31. Applicant's arguments with respect to claims 6 and 13 have been considered but are moot in view of the new ground(s) of rejection necessitated by applicant's amendment.

Conclusion

32. The examiner notes that applicant's claims could also be rejected with alternate embodiments of Grinshpun, for example Fig. 5, as discussed in the interview 04/30/08.
33. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).
34. A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the

mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to BRANON C. PAINTER whose telephone number is (571)270-3110. The examiner can normally be reached on Mon-Fri 7:30AM-5:00PM, alternate Fridays off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Brian Glessner can be reached on (571) 272-6843. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

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